Scrubber Downtime Notification Report

14 U. Z / Z I

Navajo Generating Station

Part 52.145.5.iv ...the owner or operator shall notify the Administrator by telephone or in writing within one business day of any outage of the control system needed for compliance with the emission limitation...

Please note the following control system outage:

Unit 2		Absorber A	Absorber B
	Outage Began (Date and Time)		12/04/14 12:03 MST
	Outage Ended (Date and Time)		12/04/14 12:21 MST
	Outage Began (Date and Time)		12/04/14 13:53 MST
	Outage Ended (Date and Time)		12/04/14 14:05 MST
	Outage Began (Date and Time)		12/04/14 23:30 MST
	Outage Ended (Date and Time)		12/05/14 02:43 MST

Comments: The short Absorber outage was caused by an electrical buss malfunction which caused intermittent loss of power to the Absorbers. The problem was due to moisture in the buss contacts and was corrected as soon as possible. There were no excess emissions associated with this absorber outage.

Reviewed by:

Date of Report: 12/09/2014

Transmitted to EPA Region IX, fax(415 947-3579) Navajo EPA, fax (928 729-4323)

NAVAJO GENERATING STATION EXCESS EMISSIONS REPORT THIRD QUARTER, 2014

NAVAJO GENERATING STATION

ROBERT K. TALBOT

Manager

P.O. Box 850 Page, AZ 86040 (928) 645-6217 Fax (928) 645-7298

October 28, 2014

CERTIFIED MAIL

Dr. Deborah Jordon, Director Air Division Environmental Protection Agency Region IX (AIR-1) 75 Hawthorne Street San Francisco, California 94105

Mr. Steven Etsitty, Executive Director Navajo Environmental Protection Administration P.O. Box 339 Window Rock, Arizona 86515

RE: Navajo Generating Station FIP – 40 CFR §49.24, Title V Permit to Operate No. NN-ROP-05-06 and PSD Permit Number AZ 08-01 Quarterly Emission Report

Dear Dr. Jordon and Mr. Etsitty:

Enclosed is the Third Quarter 2014 emissions report for Navajo Generating Station. The report contains the following information:

- Daily electrical energy generated in megawatt-hours (permit condition II.B.5.b).
- Sulfur dioxide and carbon dioxide information according to the procedures set forth at 40 CFR 60.7 and permit condition II.B.5.a;
- Identification of periods when opacity values exceeded 20 %, excluding condensed uncombined water droplets over any 6-minute period, and 40% averaged over 6 minutes, during absorber upset transition periods.
- Identification of periods when sulfur dioxide emissions exceeded 1.0 lb/mmBTU as a plantwide 3-hour average, and a CEMS data assessment according to the procedures set forth at 40 CFR §49.24(d)(1) of NGS FIP.

• Nitrogen Oxide and Carbon Monoxide information according to PSD Permit Number AZ 08-01A, condition IX.G.5

With respect to the opacity data presented in the report, please note that 6-minute opacity readings are not individually listed during scrubber operations because the saturated stack conditions impedes the accuracy of the readings. The report identifies the block time periods for each unit that the scrubbers were operational and the stacks were saturated, in lieu of reporting the individual 6-minute wet stack readings.

Please contact Paul Ostapuk at (928) 645-6577 if you have any questions.

Sincerely,

Robert K. Talbot

Plant Manager / Alternate Designated Representative

Enclosures

cc: Barbara Sprungl, SRP – Manager Air Quality & Lab Services Environmental File

SUMMAN

CEM EXCESS EMISSION REPORT

Salt River Project Navajo Generating Station Page, Arizona

UNIT # 1, 2, 3

YEAR 2014

QUARTER THIRD

This report is in accordance with reporting requirements set forth in the NGS FIP – 40 CFR §49.24, Title V Permit to Operate, Permit No. NN-ROP 05-06, Section II.B.5 and PSD Permit Number AZ 08-01A, Condition IX.G.5.

Emission standards in this report are in accordance with the NGS FIP -40 CFR §49.24 sections (d)(1), (d)(3), (d)(4), (e)(8), Title V Permit to Operate, NN-ROP-05-06 Section II.B.2 and PSD Permit Number AZ 08-01A Conditions IX.B.1 and IX.B.2

EXCESS EMISSIONS FOR QUARTER: None

NAVAJO GENERATING STATION CEM SUMMARY SHEET THIRD QUARTER OF 2014

	UNIT 1	UNIT 2	UNIT 3
# Hours of I.D. Fan Operation	2208.0 hrs	2208.0 hrs	2207.0 hrs
# Hours Boiler Operation	2208.0 hrs	2208.0 hrs	2204.7 hrs
Opacity Monitor Availability	99.71 %	99.83 %	97.31 %
SO2 #/mmBTU Availability	99.77 %	99.55 %	98.55 %
NOx #/mmBTU Availability	99.46 %	98.82 %	98.96 %
CO #/mmBTU Availability	99.77 %	99.32 %	99.32 %
Opacity Emission >20% (6-Min)	0.0 hrs	0.0 hrs	0.0 hrs
% Operating Time	0.00 %	0.00 %	0.00 %
Opacity Emission >40% (6-Min)	0.0 hrs	0.0 hrs	0.0 hrs
% Operating Time	0.00 %	0.00 %	0.00 %
SO2 #/mmBTU > 0.1 (365BOD)	0.0 days	0.0 days	0.0 days
% Operating Time	0.00 %	0.00 %	0.00 %
SO2 #/mmBTU >1.0 (3Hr)	0.0 days	0.0 days	0.0 days
% Operating Time	0.0 %	0.0 %	0.0 %
NOx #/mmBTU >0.24 (30D)	0.0 days	0.0 days	0.0 days
% Operating Time	0.0 %	0.0 %	0.0 %
CO #/mmBTU >0.23 (30D)	0.0 days	0.0 days	0.0 days
% Operating Time	0.0 %	0.0 %	0.0 %
CO #/mmBTU >0.15 (12M)	0.0 days	0.0 days	0.0 days
% Operating Time	0.0 %	0.0 %	0.0 %

Plant Coal, Ash and Road Sweeping Activities - Opacity Emission ≥20% (hours)

NAVAJO GENERATING STATION CEMS MONITOR LISTING

Teledyne Monitor Labs Inc.
Opacity Monitor
Model Lighthawk 560

Teledyne Monitor Labs Inc. Flow Monitor Ultra Flow 150

Thermo Environmental Sulfur Dioxide Monitor Model 43i

> Thermo Environmental CO₂ Monitor Model 410i

> Thermo Environmental NO_x Monitor Model 42i

Thermo Environmental CO Monitor Model 48i

UNIT 1 REPORT SUMMARY

- o Daily Electric Energy Report
- o Opacity Excess Emission and Monitoring System Performance
- o Excess Wet Opacity Report
- o Excess Dry Opacity Report
- o Opacity Downtime Report
- SO2 Excess Emission and Monitoring System Performance
- SO2 Excess Emission Report 1.0 lb/mmBTU
- SO2 Excess Emission Report 0.1 lb/mmBTU
- o SO2 Downtime Report
- o CO2 Downtime Report
- NOx Excess Emission Report
- NOx Downtime Report
- CO Excess Emission Report- 30-Day
- o CO Excess Emission Report- 12-Month
- o CO Downtime Report

40 CFR 52.145.d.5.iii Daily Electric Energy Report Gigawatt Hours

Source: Unit 1 Channel: 1 GW365

Report for 07/01/2014 thru 09/30/2014

Date	Gigawatts	Date	Gigawatts	Date	Gigawatts
7/1/14	18.91	8/1/14	19.46	9/1/14	19.35
7/2/14	19.20	8/2/14	19.47	9/2/14	19.65
7/3/14	19.06	8/3/14	19.47	9/3/14	19.68
7/4/14	19.23	8/4/14	19.49	9/4/14	19.68
7/5/14	18.55	8/5/14	19.49	9/5/14	19.66
7/6/14	18.91	8/6/14	19.49	9/6/14	19.68
7/7/14	17.45	8/7/14	19.49	9/7/14	19.68
7/8/14	19.39	8/8/14	19.49	9/8/14	19.43
7/9/14	18.75	8/9/14	19.49	9/9/14	19.64
7/10/14	19.43	8/10/14	19.49	9/10/14	19.58
7/11/14	18.29	8/11/14	19.44	9/11/14	19.59
7/12/14	18.15	8/12/14	19.51	9/12/14	19.53
7/13/14	18.97	8/13/14	19.58	9/13/14	19.61
7/14/14	19.08	8/14/14	19.65	9/14/14	19.60
7/15/14	19.27	8/15/14	19.68	9/15/14	19.66
7/16/14	18.74	8/16/14	19.68	9/16/14	19.59
7/17/14	18.70	8/17/14	19.12	9/17/14	19.64
7/18/14	18.43	8/18/14	19.62	9/18/14	19.68
7/19/14	19.05	8/19/14	19.68	9/19/14	19.68
7/20/14	18.87	8/20/14	19.67	9/20/14	19.68
7/21/14	19.49	8/21/14	19.66	9/21/14	19.53
7/22/14	19.49	8/22/14	19.22	9/22/14	18.75
7/23/14	19.49	8/23/14	19.63	9/23/14	19.53
7/24/14	19.49	8/24/14	19.63	9/24/14	19.62
7/25/14	19.49	8/25/14	19.35	9/25/14	19.63
7/26/14	19.49	8/26/14	19.63	9/26/14	19.62
7/27/14	19.49	8/27/14	19.44	9/27/14	19.53
7/28/14	19.49	8/28/14	19.61	9/28/14	19.58
7/29/14	19.49	8/29/14	19.50	9/29/14	19.60
7/30/14	19.49	8/30/14	19.63	9/30/14	19.56
7/31/14	19.44	8/31/14	19.64		

Invalid Boiler Operating Day

40 CFR Part 60 CEM Quarterly Report Excess Emission and Monitoring System Performance

Reporting dates 07/01/2014 00:00 through 09/30/2014 23:59

Pollutant: Opacity / "1 Opacity"

Emission Limit: 40

Company Name: SRP - Navajo, Unit 1

Address: Navajo Generating Station Page, AZ 86040

Unit Description: coal-fired cyclonic boiler power plant

Total source operating time in reporting period: 2208.0 hours

Emission Data Summary(note 1)		CEMS Downtime Summary(note 1)	
1. Duration of excess emissions in period due t	to:	1. Duration of CEMS downtime in period due to:	
a. Start Up/Shut Down	0.0	a. Monitoring Equipment Malfunction	0.0
b. Control Equipment Failure	0.0	b. Non-Monitoring Equipment Malfunction	5.3
c. Process Problems	0.0	c. Quality Assurance	0.9
d. Exempt (Wet Stack - Scrubber Operation)	2208.0	d. Other Known Monitor Downtime Cause	0.2
e. UnKnown Excess Emissions Cause	0.0	e. UnKnown Monitor Downtime Cause	0.0
2. Total duration of excess emission	0.0	2. Total duration of CEMS downtime	6.4
3. Excess emission duration (%)	0.00%	3. CEMS downtime (%)	0.29%

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

Name: L Dee Shakespear

Signature: The Holomore

Title: Air Quality Environmental Engineer

Navajo Unit 1 Excess Wet Opacity Report

SRP - Navajo, Unit 1 Navajo Generating Station Page, AZ 86040 Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 1 Opacity SOURCE: Unit 1 EPISODE: Opacity Over Limit

Total Duration: 2208.0 Hours

Navajo Unit 1 Excess Dry Opacity Report

SRP - Navajo, Unit 1 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 1 Opacity SOURCE: Unit 1 EPISODE: Opacity Over Limit

Incident

End

Incident Start

Length Hours

Reason

Total Duration 0.0 Hours

Navajo Unit 1 Opacity Downtime Report

SRP - Navajo, Unit 1 Navajo Generating Station

Page, AZ 86040

Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 1 Opacity SOURCE: Unit 1 EPISODE: Opacity Analyzer Downtime

Incident Start	Incident End	Length Mins.	
			Reason
07/08/14 21:06 -	07/08/14 21:11	06 Data	Controller Malfunction
07/10/14 15:12 -	07/10/14 15:17	06 Preve	entative Maintenance Activities
07/19/14 14:30 -	THE RESERVE OF THE PARTY OF THE	12 Data	Controller Malfunction
07/30/14 11:18 -	.50	18 Data	Controller Malfunction
08/02/14 18:30 -	08/02/14 18:53	24 Data	Controller Malfunction
08/10/14 19:00 -	08/10/14 22:29	210 Data	Controller Malfunction
08/10/14 22:36 -	08/10/14 22:41	06 Data	Controller Malfunction
09/17/14 13:54 -	09/17/14 14:47	54 Qual:	ity Assurance Activities
09/18/14 16:30 -	09/18/14 16:35	06 Preve	entative Maintenance Activities
09/28/14 11:42 -	09/28/14 11:47	06 Data	Controller Malfunction
09/29/14 14:06 -	09/29/14 14:11	06 Data	Controller Malfunction
09/30/14 11:18 -	09/30/14 11:23	06 Data	Controller Malfunction
09/30/14 13:36 -	09/30/14 13:43	06 Data	Controller Malfunction
09/30/14 16:48 -	09/30/14 16:53	06 Data	Controller Malfunction
09/30/14 17:24 -	09/30/14 17:29	06 Data	Controller Malfunction
09/30/14 21:06 -	09/30/14 21:06	06 Data	Controller Malfunction

TOTAL DURATION = 6.4 Hours

40 CFR Part 60 CEM Quarterly Report Excess Emission and Monitoring System Performance

Reporting dates 07/01/2014 00:00 through 09/30/2014 23:59

Pollutant: SO2 lb/mmBTU (365 Boiler Operating Day rolling average) Emission Limit: 0.1

Company Name: SRP - Navajo, Unit 1

Address: Navajo Generating Station Page, AZ 86040

Unit Description: coal-fired cyclonic boiler power plant

Total source operating time in reporting period: 2208.0 hours

Emission Data Summary(note 1)	CEMS Downtime Summary(note 1)		
1. Duration of excess emissions in period due t	1. Duration of CEMS downtime in period due to:		
a. Start Up/Shut Down	0.0	a. Monitoring Equipment Malfunction	0.0
b. Control Equipment Failure	0.0	b. Non-Monitoring Equipment Malfunction	5.0
c. Process Problems	0.0	c. Quality Assurance	0.0
d. Exempt (Wet Stack - Scrubber Operation)	0.0	d. Other Known Monitor Downtime Cause	0.0
e. UnKnown Excess Emissions Cause	0.0	e. UnKnown Monitor Downtime Cause	0.0
2. Total duration of excess emission	0.0	2. Total duration of CEMS downtime	5.0
3. Excess emission duration (%)	0.00%	3. CEMS downtime (%)	0.23%

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

Name: L Dee Shakespear

Signature: _

Title: Air Quality Environmental Engineer

Date: 10/37/14

Navajo Unit 1 SO2 Excess Emission Report

SRP - Navajo, Unit 1 Navajo Generating Station

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

Page, AZ 86040

Emission Limit: 1.0 lb/mmBTU, 3 hr. plant wide average

Date and Time Period

Magnitude

Reason

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 1 SO2 Excess Emission Report

SRP - Navajo, Unit 1 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

Emission Limit: 0.1 lb/mmBTU, 365 BOD rolling average

Date and Time Period

Magnitude

Reason

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 1 SO2 Downtime Report

SRP - Navajo, Unit 1 Navajo Generating Station

Start: 07/01/2014 00:00 End: 09/30/2014 23:59

Page, AZ 86040

POLLUTANT: 1 SO2 ppm SOURCE: Unit 1 EPISODE: SO2 Analyzer Downtime

Incident Incident Length
 Start
 End
 Hrs.
 Reason

 08/02/14 18:00 - 08/02/14 18:59
 1
 Data Controller Malfunction

 08/10/14 19:00 - 08/10/14 22:59
 4
 Power Failure

Total Duration = 5.0 hrs

Navajo Unit 1 CO2 Downtime Report

SRP - Navajo, Unit 1 Navajo Generating Station

Page, AZ 86040

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

POLLUTANT: 1 CO2 cor SOURCE: Unit 1 EPISODE: CO2 Analyzer Downtime

Incident Length Incident
 Start
 End
 Hrs.
 Red

 08/02/14 18:00 - 08/02/14 18:59
 1
 Data Controlle

 08/10/14 19:00 - 08/02/14 22:59
 4
 Power Failure
 Reason Data Controller Malfunction

Total Duration = 5.0 hrs

Navajo Unit 1 NOx Excess Emission Report

SRP - Navajo, Unit 1 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00 End: 09/30/2014 23:59

Emission Limit: 0.24 lb/mmBTU, 30 Day rolling average

Date and Time Period

Magnitude

Reason

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 1 NOx Downtime Report

SRP - Navajo, Unit 1 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 1 NOx cor SOURCE: Unit 1 EPISODE: NOx Analyzer Downtime

Incident	Incident		Length		
Start	End		Hrs.	Reason	
08/02/14 18:00	- 08/02/14 18:59	1	Data Cont	roller Malfunction	
08/05/14 10:00	- 08/05/14 16:59	7	Analyzer	Pump Failure	
08/10/14 19:00	- 08/10/14 22:59	4	Power Fai	lure	

Total Duration = 12.0 hrs

Navajo Unit 1 CO Excess Emission Report

SRP - Navajo, Unit 1 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00 End: 09/30/2014 23:59

Emission Limit: 0.23 lb/mmBTU, 30 Day rolling average

Date and Time Period

Magnitude

Reason

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 1 CO Excess Emission Report

SRP - Navajo, Unit 1 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

Emission Limit: 0.15 lb/mmBTU, 12-Month rolling average

Date and Time Period

Magnitude

Reason

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 1 CO Downtime Report

SRP - Navajo, Unit 1 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

POLLUTANT: 1 CO cor SOURCE: Unit 1 EPISODE: CO Analyzer Downtime

Incident	Incident	Le	ngth
Start	End	Н	rs. Reason
	- 08/02/14 18:59	1	Data Controller Malfunction
08/10/14 19:00	- 08/10/14 22:59	4	Power Failure

Total Duration = 5.0 hrs

UNIT 2 REPORT SUMMARY

- Daily Electric Energy Report
- o Opacity Excess Emission and Monitoring System Performance
- o Excess Wet Opacity Report
- o Excess Dry Opacity Report
- Opacity Downtime Report
- o SO2 Excess Emission and Monitoring System Performance
- o SO2 Excess Emission Report 1.0 lb/mmBTU
- SO2 Excess Emission Report 0.1 lb/mmBTU
- SO2 Downtime Report
- o CO2 Downtime Report
- NOx Excess Emission Report
- NOx Downtime Report
- o CO Excess Emission Report- 30-Day
- o CO Excess Emission Report- 12-Month
- CO Downtime Report

40 CFR 52.145.d.5.iii Daily Electric Energy Report Gigawatt Hours

Source: Unit 2 Channel: 2 GW365

Report for 07/01/2014 thru 09/30/2014

Date	Gigawatts	Date	Gigawatts	Date	Gigawatts
7/1/14	19.37	8/1/14	19.35	9/1/14	18.91
7/2/14	19.25	8/2/14	19.21	9/2/14	19.26
7/3/14	19.38	8/3/14	19.13	9/3/14	19.17
7/4/14	19.32	8/4/14	18.73	9/4/14	19.28
7/5/14	19.21	8/5/14	18.40	9/5/14	19.25
7/6/14	19.32	8/6/14	17.97	9/6/14	19.33
7/7/14	19.40	8/7/14	19.40	9/7/14	19.15
7/8/14	19.35	8/8/14	19.39	9/8/14	18.42
7/9/14	18.96	8/9/14	19.36	9/9/14	19.03
7/10/14	19.22	8/10/14	19.33	9/10/14	18.49
7/11/14	19.21	8/11/14	19.26	9/11/14	18.98
7/12/14	19.17	8/12/14	19.19	9/12/14	19.13
7/13/14	19.41	8/13/14	19.01	9/13/14	18.92
7/14/14	19.39	8/14/14	18.83	9/14/14	19.06
7/15/14	18.98	8/15/14	19.25	9/15/14	19.28
7/16/14	18.36	8/16/14	19.04	9/16/14	19.40
7/17/14	18.79	8/17/14	18.97	9/17/14	19.35
7/18/14	18.31	8/18/14	18.28	9/18/14	19.12
7/19/14	18.99	8/19/14	18.75	9/19/14	19.45
7/20/14	17.90	8/20/14	18.94	9/20/14	19.22
7/21/14	17.84	8/21/14	19.39	9/21/14	17.57
7/22/14	18.85	8/22/14	18.54	9/22/14	18.42
7/23/14	19.03	8/23/14	18.33	9/23/14	19.18
7/24/14	19.22	8/24/14	19.24	9/24/14	19.45
7/25/14	19.35	8/25/14	18.84	9/25/14	19.23
7/26/14	18.74	8/26/14	19.37	9/26/14	19.01
7/27/14	18.10	8/27/14	19.11	9/27/14	18.66
7/28/14	18.88	8/28/14	19.44	9/28/14	17.96
7/29/14	18.95	8/29/14	18.97	9/29/14	19.41
7/30/14	18.95	8/30/14	18.77	9/30/14	
7/31/14	18.89	8/31/14	18.14		

Invalid Boiler Operating Day

40 CFR Part 60 CEM Quarterly Report Excess Emission and Monitoring System Performance

Reporting dates 07/01/2014 00:00 through 09/30/2014 23:59

Pollutant: Opacity / "2 Opacity"

Emission Limit: 40

Company Name: SRP - Navajo, Unit 2

Address: Navajo Generating Station Page, AZ 86040

Unit Description: coal-fired cyclonic boiler power plant

Total source operating time in reporting period: 2208.0 hours

Emission Data Summary(note 1)		CEMS Downtime Summary(note 1)	
1. Duration of excess emissions in period due	1. Duration of CEMS downtime in period due to:		
a. Start Up/Shut Down	0.0	a. Monitoring Equipment Malfunction	0.00
b. Control Equipment Failure	0.0	b. Non-Monitoring Equipment Malfunction	2.6
c. Process Problems	0.0	c. Quality Assurance	0.9
d. Exempt (Wet Stack - Scrubber Operation)	2208.0	d. Other Known Monitor Downtime Cause	0.3
e. UnKnown Excess Emissions Cause	0.0	e. UnKnown Monitor Downtime Cause	0.0
2. Total duration of excess emission	0.0	2. Total duration of CEMS downtime	3.80
3. Excess emission duration (%)	0.00%	3. CEMS downtime (%)	0.17%

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

Name: L Dee Shakespear

Signature:

Title: Air Quality Environmental Engineer

Date: 10/27/14

Navajo Unit 2 Excess Wet Opacity Report

SRP - Navajo, Unit 2 Navajo Generating Station Page, AZ 86040 Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 2 Opacity SOURCE: Unit 2 EPISODE: Opacity Over Limit

 Incident
 Incident
 Length

 Start
 End
 Hours
 Reason
 Action

 07/01/14
 00:00 - 09/30/14
 23:59
 2208.0
 Wet Scrubber Operation
 Exempt

Total Duration: 2208.0 Hours

Navajo Unit 2 Excess Dry Opacity Report

SRP - Navajo, Unit 2 Navajo Generating Station Page, AZ 86040 Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 1 Opacity SOURCE: Unit 2 EPISODE: Opacity Over Limit

Incident Start

Incident End

Length Hours

Reason

Total Duration 0.0 Hours

Navajo Unit 2 Opacity Downtime Report

SRP - Navajo, Unit 2 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 2 Opacity SOURCE: Unit 2 EPISODE: Opacity Analyzer Downtime

Incident Start	Incident End	Leng Mir	
07/10/14 14:42 -	07/10/14 14:53	12	Preventative Maintenance Activities
07/30/14 13:06 -	07/30/14 14:41	96	Data Controller Malfunction
08/05/14 09:12 -	08/05/14 10:11	60	Data Controller Malfunction
09/17/14 15:12 -	09/17/14 16:05	54	Quality Assurance Activities
09/18/14 06:12 -	09/18/14 06:17	06	Preventative Maintenance Activities

TOTAL DURATION = 3.8 Hours

40 CFR Part 60 CEM Quarterly Report Excess Emission and Monitoring System Performance

Reporting dates 07/01/2014 00:00 through 09/30/2014 23:59

Pollutant: SO2 lb/mmBTU (365 Boiler Operating Day rolling average) Emission Limit: 0.1

Company Name: SRP - Navajo, Unit 2

Address: Navajo Generating Station Page, AZ 86040

Unit Description: coal-fired cyclonic boiler power plant

Total source operating time in reporting period: 2208.0 hours

Emission Data Summary(note 1)		
1. Duration of excess emissions in period due to:		
0.0	a. Monitoring Equipment Malfunction	1.0
0.0	b. Non-Monitoring Equipment Malfunction	2.0
0.0	c. Quality Assurance	2.0
0.0	d. Other Known Monitor Downtime Cause	5.0
0.0	e. UnKnown Monitor Downtime Cause	0.0
0.0	2. Total duration of CEMS downtime	10.0
0.00%	3. CEMS downtime (%)	0.45%
	0.0	a. Monitoring Equipment Malfunction b. Non-Monitoring Equipment Malfunction c. Quality Assurance d. Other Known Monitor Downtime Cause e. UnKnown Monitor Downtime Cause Total duration of CEMS downtime

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals

responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statment(s) made in this document or its attachments may be punishable as a criminal offense."

Name: L Dee Shakespear

Signature:

Title: Air Quality Environmental Engineer

Date: 10/27/14

Navajo Unit 2 SO2 Excess Emission Report

SRP - Navajo, Unit 2 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00 End: 09/30/2014 23:59

Emission Limit: 1.0 lb/mmBTU, 3 hr. plant wide average

Date and Time Period

Magnitude

Reason

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 2 SO2 Excess Emission Report

SRP - Navajo, Unit 2 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

Emission Limit: 0.1 lb/mmBTU, 365 BOD rolling average

Date and Time Period

Magnitude

Reason

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 2 SO2 Downtime Report

SRP - Navajo, Unit 2 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 2 SO2 ppm SOURCE: Unit 2 EPISODE: SO2 Analyzer Downtime

Incident	Incident		Length		
_Start	End		Hrs.	Reason	
07/07/14 10:00 -	07/07/14 10:59	1	Preventat	ive Maintenance Activities	
07/29/14 10:00 -	- 07/29/14 14:59	5	Preventat	ive Maintenance Activities	
07/30/14 07:00 -	- 07/30/14 7:59	1	Data Cont	roller Malfunction	
07/30/14 13:00 -	- 07/30/14 14:59	2	Data Cont	roller Malfunction	
08/04/14 06:00 -	- 08/04/14 06:59	1	Analyzer	Calibration Failure	
08/04/14 13:00 -	- 08/04/14 14:59	2	Preventat	ive Maintenance Activities	
08/05/14 09:00	- 08/05/14 09:59	1	Data Cont	roller Software upgrade	
08/05/14 11:00 -	- 08/05/14 11:59	1	Preventat	ive Maintenance Activities	
08/07/14 14:00	- 08/07/14 14:59	1	Preventat	ive Maintenance Activities	

Navajo Unit 2 CO2 Downtime Report

SRP - Navajo, Unit 2 Navajo Generating Station Page, AZ 86040 Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 2 CO2 cor SOURCE: Unit 2 EPISODE: CO2 Analyzer Downtime

Incident	Incident	Length	L
Start	End	Hrs.	Reason
	- 07/07/14 10:59	1	Preventative Maintenance Activities
07/29/14 10:00	- 07/29/14 15:59	6	Preventative Maintenance Activities
07/30/14 06:00	- 07/30/14 10:59	5	Analyzer Calibration Failure
	- 07/30/14 14:59	2	Data Controller Malfunction
08/04/14 06:00	- 08/04/14 06:59	1	Quality Assurance Activities
08/04/14 13:00	- 08/04/14 14:59	2	Preventative Maintenance Activities
08/05/14 09:00	- 08/05/14 09:59	1	Data Controller Software upgrade
08/05/14 11:00	- 08/05/14 11:59	1	Preventative Maintenance Activities
08/07/14 14:00	- 08/07/14 14:59	1	Preventative Maintenance Activities

Navajo Unit 2 NOx Excess Emission Report

SRP - Navajo, Unit 2 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

Emission Limit: 0.24 lb/mmBTU, 30 Day rolling average

Date and Time Period

Magnitude

Reason

No Excess Emission

Navajo Unit 2 CO Excess Emission Report

SRP - Navajo, Unit 2 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

Emission Limit: 0.23 lb/mmBTU, 30 Day rolling average

Date and Time Period

Magnitude

Reason

No Excess Emission

UNIT 3 REPORT SUMMARY

- Daily Electric Energy Report
- o Opacity Excess Emission and Monitoring System Performance
- Excess Wet Opacity Report
- Excess Dry Opacity Report
- o Opacity Downtime Report
- SO2 Excess Emission and Monitoring System Performance
- SO2 Excess Emission Report 1.0 lb/mmBTU
- o SO2 Excess Emission Report 0.1 lb/mmBTU
- o SO2 Downtime Report
- CO2 Downtime Report
- o NOx Excess Emission Report
- NOx Downtime Report
- CO Excess Emission Report- 30-Day
- o CO Excess Emission Report- 12-Month
- o CO Downtime Report

40 CFR 52.145.d.5.iii Daily Electric Energy Report Gigawatt Hours

Source: Unit 3 Channel: 3 GW365

Report for 07/01/2014 thru 09/30/2014

Date	Gigawatts	Date	Gigawatts	Date	Gigawatts
7/1/14	18.67	8/1/14	19.34	9/1/14	19.10
7/2/14	18.46	8/2/14	18.90	9/2/14	19.12
7/3/14	18.99	8/3/14	19.21	9/3/14	19.39
7/4/14	19.00	8/4/14	18.83	9/4/14	19.10
7/5/14	18.88	8/5/14	18.44	9/5/14	19.45
7/6/14	18.79	8/6/14	17.80	9/6/14	19.35
7/7/14	17.06	8/7/14	19.33	9/7/14	19.20
7/8/14	19.00	8/8/14	19.30	9/8/14	18.83
7/9/14	18.37	8/9/14	19.31	9/9/14	19.36
7/10/14	19.17	8/10/14	19.20	9/10/14	19.44
7/11/14	17.83	8/11/14	19.32	9/11/14	19.45
7/12/14	17.46	8/12/14	19.38	9/12/14	19.19
7/13/14	18.59	8/13/14	19.11	9/13/14	19.45
7/14/14	19.02	8/14/14	19.32	9/14/14	18.93
7/15/14		8/15/14	19.44	9/15/14	19.43
7/16/14	18.64	8/16/14	19.19	9/16/14	18.68
7/17/14	18.50	8/17/14	18.80	9/17/14	19.03
7/18/14	18.13	8/18/14	17.59	9/18/14	19.37
7/19/14	19.33	8/19/14	19.18	9/19/14	19.39
7/20/14	18.10	8/20/14	18.59	9/20/14	19.40
7/21/14	17.78	8/21/14	19.10	9/21/14	18.23
7/22/14	18.71	8/22/14	18.61	9/22/14	18.31
7/23/14	19.29	8/23/14	18.91	9/23/14	19.23
7/24/14	19.34	8/24/14	19.12	9/24/14	19.22
7/25/14	19.04	8/25/14	18.97	9/25/14	19.22
7/26/14	18.96	8/26/14	19.34	9/26/14	19.30
7/27/14	18.34	8/27/14	19.04	9/27/14	18.85
7/28/14	18.39	8/28/14	19.39	9/28/14	17.85
7/29/14	19.19	8/29/14	18.86	9/29/14	19.40
7/30/14	19.04	8/30/14	18.70	9/30/14	18.37
7/31/14	19.23	8/31/14	18.24		

Invalid Boiler Operating Day

40 CFR Part 60 CEM Quarterly Report Excess Emission and Monitoring System Performance

Reporting dates 07/01/2014 00:00 through 09/30/2014 23:59

Pollutant: Opacity / "3 Opacity"

Emission Limit: 40

Company Name: SRP - Navajo, Unit 3

Address: Navajo Generating Station Page, AZ 86040

Unit Description: coal-fired cyclonic boiler power plant

Total source operating time in reporting period: 2204.7 hours

Emission Data Summary(note 1)		CEMS Downtime Summary(note 1)	
1. Duration of excess emissions in period due	to:	1. Duration of CEMS downtime in period due to:	
a. Start Up/Shut Down	0.0	a. Monitoring Equipment Malfunction	55.9
b. Control Equipment Failure	0.0	b. Non-Monitoring Equipment Malfunction	2.3
c. Process Problems	0.0	c. Quality Assurance	1.0
d. Exempt (Wet Stack - Scrubber Operation)	2207.0	d. Other Known Monitor Downtime Cause	0.2
e. UnKnown Excess Emissions Cause	0.0	e. UnKnown Monitor Downtime Cause	0.0
2. Total duration of excess emission	0.0	2. Total duration of CEMS downtime	59.4
3. Excess emission duration (%)	0.0%	3. CEMS downtime (%)	2.69%

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statment(s) made in this document or its attachments may be punishable as a criminal offense."

Name: L Dee Shakespear

Signature: The Shirtugar

Title: Air Quality Environmental Engineer

Date: 10/27/14

Navajo Unit 3 Excess Wet Opacity Report

SRP - Navajo, Unit 3 Navajo Generating Station Page, AZ 86040 Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 3 Opacity SOURCE: Unit 3 EPISODE: Opacity Over Limit

Incident	Incident	Length			
Start	End	Hours	Reason	Action	
07/01/14 00:00 -		349.0	Wet Scrubber	Operation Exempt	
07/15/14 14:00 -	09/30/14 23:59	1858.0	Wet Scrubber	Operation Exempt	

Total Duration: 2207.0 Hours

Navajo Unit 3 Excess Dry Opacity Report

SRP - Navajo, Unit 3 Navajo Generating Station Page, AZ 86040 Start: 07/01/2014 00:00 End: 09/30/2014 23:59

Reason

POLLUTANT: 3 Opacity SOURCE: Unit 3 EPISODE: Opacity Over Limit

Incident Incident Length
Start End Hours

Total Duration 0.0 Hours

Navajo Unit 3 Opacity Downtime Report

SRP - Navajo, Unit 3 Navajo Generating Station Page, AZ 86040 Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 3 Opacity SOURCE: Unit 3 EPISODE: Opacity Analyzer Downtime

Incident	Incident	Len	gth
Start	End	Mi	ns. Reason
07/10/14 14:24 -	07/10/14 14:29	06	Preventative Maintenance Activities
07/21/14 09:36 -	07/21/14 11:05	90	Data Controller Malfunction
07/23/14 11:06 -	07/23/14 11:41	36	Data Controller Malfunction
08/09/14 05:30 -	08/11/14 06:47	2958	Calibration Failure - Comm Circuit Board Failure
08/12/14 06:48 -	08/12/14 12:41	354	Calibration Failure - Comm Circuit Board Failure
08/26/14 09:00 -	08/26/14 09:23	24	Circuit Board Repair Activities
08/28/14 15:06 -	08/28/14 15:23	18	Circuit Board Repair Activities
09/10/14 00:36 -	09/10/14 00:41	06	Data Controller Malfunction
09/18/14 09:06 -	09/17/14 10:05	60	Quality Assurance Activities
09/18/14 17:00 -	09/18/14 17:05	06	Preventative Maintenance Activities
09/20/14 09:06 -	09/20/14 09:11	06	Data Controller Malfunction

TOTAL DURATION = 59.4 Hours

40 CFR Part 60 CEM Quarterly Report Excess Emission and Monitoring System Performance

Reporting dates 07/01/2014 00:00 through 09/30/2014 23:59

Pollutant: SO2 1b/mmBTU (365 Boiler Operating Day rolling average)

Emission Limit: 0.1

Company Name: SRP - Navajo, Unit 3

Address: Navajo Generating Station Page, AZ 86040

Unit Description: coal-fired cyclonic boiler power plant

Total source operating time in reporting period: 2204.7 hours

Emission Data Summary(note 1)		CEMS Downtime Summary(note 1)	
1. Duration of excess emissions in period due	to:	1. Duration of CEMS downtime in period due to:	
a. Start Up/Shut Down	0.0	a. Monitoring Equipment Malfunction	17.0
b. Control Equipment Failure	0.0	b. Non-Monitoring Equipment Malfunction	1.0
c. Process Problems	0.0	c. Quality Assurance	2.0
d. Exempt (Wet Stack - Scrubber Operation)	0.0	d. Other Known Monitor Downtime Cause	12.0
e. UnKnown Excess Emissions Cause	0.0	e. UnKnown Monitor Downtime Cause	0.0
2. Total duration of excess emission	0.0	2. Total duration of CEMS downtime	32.0
3. Excess emission duration (%)	0.00%	3. CEMS downtime (%)	1.45%

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

Name: L Dee Shakespear

Signature:

Title: Air Quality Environmental Engineer

Date: 10/27/14

Navajo Unit 3 SO2 Excess Emission Report

SRP - Navajo, Unit 3 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00 End: 09/30/2014 23:59

Emission Limit: 1.0 lb/mmBTU, 3 hr. plant wide average

Date and Time Period

Magnitude

Reason

No Excess Emission

Navajo Unit 3 SO2 Excess Emission Report

SRP - Navajo, Unit 3 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

Emission Limit: 0.1 lb/mmBTU, 365 BOD rolling average

Date and Time Period

Magnitude

Reason

No Excess Emission

Navajo Unit 3 SO2 Downtime Report

SRP - Navajo, Unit 3 Navajo Generating Station Page, AZ 86040 Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 3 SO2 ppm SOURCE: Unit 3 EPISODE: SO2 Analyzer Downtime

Incident	Incident	Leng	th
Start	End	Hrs	. Reason
07/14/14 01:00 -	- 07/14/14 07:59	7	Analyzer Pump Malfunction
07/15/14 18:00 -	07/15/14 18:59	1	Quality Assurance Activities
07/23/14 11:00 -		1	Data Controller Malfunction
07/26/14 10:00 -	- 07/26/14 10:59	1	Quality Assurance Activities
07/26/14 14:00 -	07/26/14 16:59	3	Calibration Failure
08/14/14 00:00 -	- 08/14/14 01:59	2	Analyzer Malfunction
08/14/14 04:00 -	- 08/14/14 05:59	2	Analyzer Malfunction
08/19/14 09:00 -		2	Preventative Maintenance Activities
08/20/14 09:00 -	- 08/20/14 10:59	2	Preventative Maintenance Activities
08/21/14 07:00 -	- 08/21/14 08:59	2	Preventative Maintenance Activities
08/25/14 10:00	- 08/25/14 10:59	1	Preventative Maintenance Activities
08/26/14 07:00 -	- 08/26/14 08:59	2	Preventative Maintenance Activities
08/27/14 08:00	- 08/27/14 10:59	3	Preventative Maintenance Activities
08/27/14 13:00	- 08/27/14 15:59	3	Analyzer Malfunction

Navajo Unit 3 CO2 Downtime Report

SRP - Navajo, Unit 3 Navajo Generating Station Page, AZ 86040 Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 3 CO2 cor SOURCE: Unit 3 EPISODE: CO2 Analyzer Downtime

Incident Start	Incident End	Length	Danasa
		Hrs.	Reason
07/15/14 18:00 -	07/15/14 18:59	1	Quality Assurance Activities
07/23/14 11:00 -	07/23/14 11:59	1	Data Controller Malfunction
07/26/14 10:00 -	07/26/14 10:59	1	Quality Assurance Activities
07/26/14 14:00 -	07/26/14 14:59	1	Quality Assurance Activities
07/28/14 11:00 -	07/28/14 11:59	1	Preventative Maintenance Activities
08/19/14 09:00 -	08/19/14 10:59	2	Preventative Maintenance Activities
08/20/14 09:00 -	08/20/14 10:59	2	Preventative Maintenance Activities
08/21/14 07:00 -	08/21/14 07:59	1	Preventative Maintenance Activities
08/25/14 10:00 -	08/25/14 10:59	1	Preventative Maintenance Activities
08/26/14 07:00 -	08/26/14 07:59	1	Preventative Maintenance Activities
08/27/14 08:00 -	08/27/14 10:59	3	Preventative Maintenance Activities

Navajo Unit 3 NOx Excess Emission Report

SRP - Navajo, Unit 3 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

Emission Limit: 0.24 lb/mmBTU, 30 Day rolling average

Date and Time Period

Magnitude

Reason

No Excess Emission

Navajo Unit 3 NOx Downtime Report

SRP - Navajo, Unit 3 Navajo Generating Station

Page, AZ 86040

Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 3 NOx cor SOURCE: Unit 3 EPISODE: NOx Analyzer Downtime

Incident		Inci	dent	Length	
Start		En	ıd	Hrs.	Reason
07/15/14 18:0	0 -	07/15/14	18:59	1	Quality Assurance Activities
07/23/14 11:0	0 -	07/23/14	11:59	1	Data Controller Malfunction
07/26/14 05:0	0 -	07/26/14	14:59	10	Calibration Failure
07/28/14 11:0	0 -	07/28/14	11:59	1	Preventative Maintenance Activities
08/19/14 09:0	0 -	08/19/14	10:59	2	Preventative Maintenance Activities
08/20/14 09:0	0 -	08/20/14	10:59	2	Preventative Maintenance Activities
08/21/14 07:0	0 -	08/21/14	07:59	1	Preventative Maintenance Activities
08/25/14 10:0	0 -	08/25/14	10:59	1	Preventative Maintenance Activities
08/26/14 07:0	0 -	08/26/14	07:59	1	Preventative Maintenance Activities
08/27/14 08:0	0 -	08/27/14	10:59	3	Preventative Maintenance Activities

Navajo Unit 3 CO Excess Emission Report

SRP - Navajo, Unit 3 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

Emission Limit: 0.23 lb/mmBTU, 30 Day rolling average

Date and Time Period

Magnitude

Reason

No Excess Emission

Navajo Unit 3 CO Excess Emission Report

SRP - Navajo, Unit 3 Navajo Generating Station Page, AZ 86040

Start: 07/01/2014 00:00

End: 09/30/2014 23:59

Emission Limit: 0.15 lb/mmBTU, 12-Month rolling average

Date and Time Period

Magnitude

Reason

No Excess Emission

Navajo Unit 3 CO Downtime Report

SRP - Navajo, Unit 3 Navajo Generating Station Page, AZ 86040 Start: 07/01/2014 00:00 End: 09/30/2014 23:59

POLLUTANT: 3 CO cor SOURCE: Unit 3 EPISODE: CO Analyzer Downtime

Incident	Incident	Length	
_Start	End	Hrs.	Reason
07/15/14 18:00	- 07/15/14 18:59	1	Quality Assurance Activities
07/23/14 11:00	- 07/23/14 11:59	1	Data Controller Malfunction
07/26/14 10:00	- 07/26/14 10:59	1	Quality Assurance Activities
07/26/14 14:00	- 07/26/14 14:59	1	Quality Assurance Activities
07/28/14 11:00	- 07/28/14 11:59	1	Preventative Maintenance Activities
08/19/14 09:00	- 08/19/14 10:59	2	Preventative Maintenance Activities
08/20/14 09:00	- 08/20/14 10:59	2	Preventative Maintenance Activities
08/21/14 07:00	- 08/21/14 07:59	1	Preventative Maintenance Activities
08/25/14 10:00	- 08/25/14 10:59	1	Preventative Maintenance Activities
08/26/14 07:00	- 08/26/14 07:59	1	Preventative Maintenance Activities
08/27/14 08:00	- 08/27/14 10:59	3	Preventative Maintenance Activities